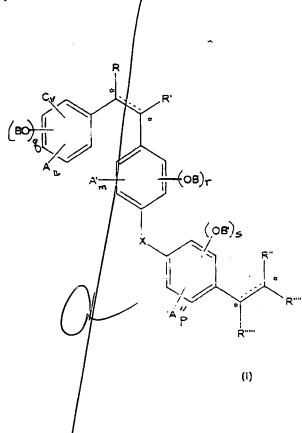
1. A compound of the formula I:



wherein stereocenters * are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR₃, where R_3 = H or C_1 - C_{20} linear or branched alkyl or C_5 - C_{20} aryl; CONR₁R₂, where R₁ and R₂ may be independently or together H, linear or branched C_1 - C_{20} alkyl or C_5 - C_{20} aryl, NH₂, OH, C_1 - C_{20} linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, linear or branched C_1 - C_{20} alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkylamino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

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R''', R'''' and R''''' are independently H, C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, or cyano. X = NH, O, S, S=O, or SO₂.

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- 2. A compound according to chaim I wherein C and A are hydrogen.
- 3. A compound according to claim 2 wherein q=2 and B is methyl.
- 4. A compound according to Claim 1 wherein A' is hydrogen and r = 0.
- 5. A compound according to Claim 1 wherein A" is hydrogen and s = O.
- 6. A compound according to Claim 1 wherein R is hydrogen and R' is $-COOR_3$. wherein R_3 is hydrogen, a cation. C_1-C_{10} alkyl or C_5-C_{10} aryl.
- 7. A compound according to Claim 1 wherein X is oxygen; R"" is hydrogen; and R"" are independently COOR₃, wherein R₃ is hydrogen, a cation, C_1 - C_{10} alkyl or C_5 - C_{10} aryl.
 - 8. The compound according to Claim 1 of the formula:

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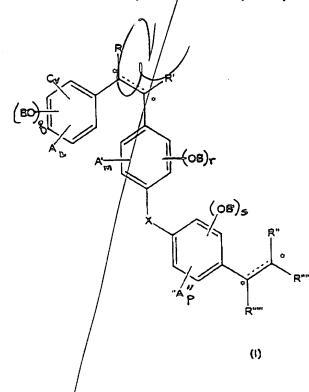
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9. A pharmaceutical composition containing a blood glucose lowering effective

amount of a compound of formula I in a pharmaceutically acceptable carrier.



wherein stereocenters # are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;



R and R' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR₃ where $R_3 = H$ or C_1 - C_{20} linear or branched alkyl or C_5 - C_{20} aryl; CONR₁R₂, where R₁ and R₂ may be independently or together H. linear or branched C_1 - C_{20} alkyl or C_5 - C_{20} aryl, NH₂, OH, C_1 - C_{20} linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C_1 - C_2 0 acylamino, C_1 - C_{20} 0 acyloxy, linear or branched C_1 - C_{20} 0 alkanoyl, C_1 - C_{20} 0 alkoxycarbonyl. O_1 - O_2 0 linear or branched alkylamino, O_1 - O_2 0 alkylcarboxylamino, O_1 - O_2 0 carbalkoxy; carboxyl. cyano, halo, hydroxy; and n. m. and p are independently integers from 0 to 3;

B, B', and B" are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkyl carboxyl amino, C_1 - C_{20} carbalkoxy; aroyl, araalkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H. C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents. COOH. C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, or cyano. X = NH, O, S, S=O, or SO₂.

- 10. A composition according to Claim 9 wherein C and A are hydrogen.
- 11. A composition according to Claim 10 wherein q=2 and B is methyl.
- 12. A composition according to Claim 9 wherein A' is hydrogen and r = 0.
- 13. A composition according to Claim 9 wherein A" is hydrogen and s = 0.
- 14. A composition according to Claim 9 wherein R is hydrogen and R' is COOR₃, wherein R₃ is hydrogen, a cation, C₁-C₁₀ alkyl or C₅-C₁₀ aryl.

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- 15. A composition according to Claim 9 wherein X is oxygen; R"" is hydrogen; and R" and R" are independently -COOR₃, wherein R₃ is hydrogen, a cation, C₁-C₁₀ alkyl or C₅-C₁₀ aryl.
 - 16. The composition according to Claim 9 wherein the compound comprises:

17. A method for lowering blood glucose in a subject comprising administering to said subject an effective blood glucose lowering amount of a composition containing a compound of the formula I in a pharmaceutically acceptable carrier.

wherein stereocenters * are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like OOR_3 , where R_3 = H or C_1 - C_{20} linear or branched alkyl or C_5 - C_{20} aryl; $CONR_1R_2$, where R_1 and R_2 may be independently or together H, linear or branched C_1 - C_{20} alkyl or C_5 - C_{20} aryl, NH_2 , OH, C_1 - C_{20} linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', and C are independently H. C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, linear or branched C_1 - C_{20} alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkylamino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are inflependently integers from 0 to 3;

B, B', and B" are independently H_1 , C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkyl carboxyl amino, C_1 - C_{20} carbalkoxy; aroyl, araalkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H. C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, or cyano. X = NH, O, S, S=O, or SO₂.

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18. A method according to Claim 17 wherein C and A are hydrogen.

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19. A method according to Claim 18 wherein q=2 and B is methyl.

20. A method according to Claim 17 wherein A' is hydrogen and r = 0.

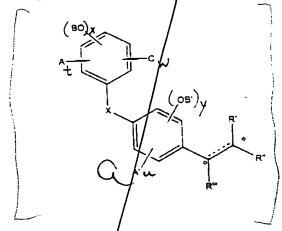
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21. A method according to Claim 17 wherein A" is hydrogen and s = 0.

- 22. A method according to Claim 17 wherein R is hydrogen and R is $-COOR_3$. wherein R₃ is hydrogen, a cation, C_1 - C_{10} alkyl or C_5 - C_{00} aryl.
- 23. A method according to Claim 17 in formula I wherein X is oxygen; R''' is hydrogen; and R''' and R''' are independently -COOR₃, wherein R₃ is hydrogen, a cation, C_1 - C_{10} alkyl or C_5 - C_{10} aryl.
 - 24. The method according to Claim 17 wherein said compound comprises:

25. A compound of the formula/II:



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wherein stereocenters * are R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z

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A. A', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20}

alkylcarboxylamino. C_1 - C_{20} carbalkoxy; carboxyl. cyano. halo. hydroxy; and t. u. and w are independently integers from 0 to 3;

B and B' are independently H. C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} alkanoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} linear or branched alkoxy. C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_6 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3:

R'. R'', and R''' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo or cyano. X = NH, O, S, S=O, or SO₂

26. A pharmaceutically composition containing a blood glucose lowering effective amount of a compound of the formula II in a pharmaceutically acceptable carrier.

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wherein stereocenters * are/R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z:

A, A', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

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B and B' are independently H. C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy: C_1 - C_{20} alkanovl. C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy. C₁-C₂₀ linear or branched alkyl amino. C₁-C₂₀ alkylcarboxylamino. C₁-C₂₀ carbalkoxy, C₆-C₂₀ aroyl, C₆-C₂₀ araalkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R''' are independently H or C_1 - C_{10} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - Q_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 -C₂₀ acylamino, C₁-C₂₀ alkoxycarbonyl, OH, C₁-C₂₀ alkoxy, halo or cyano. $X = NH, O, S, S=O, or SO_2$

27. A method for lowering blood gludose in a subject comprising administering to said subject an effective blood glucose lowering amount of a composition of the formula II.

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wherein stereocenters * are R \(\rho r S; \)

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z:

A, A', and C are independently H, C₁-C₂₀ acylamino, C₁-C₂₀ acyloxy, C₁-C₂₀ alkoxycarbonyl, C_1 - C_{20} alkoxy, C_1 - C_{20} linear or branched alkyl amino. C_1 - C_{20} alkylcarboxylamino, C₁-C₂₀ carbalkoxy; carboxyl, cyano, halo, hydroxy; and t. u. and w are independently integers from 0 to 3^{i}_{k}

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B and B' are independently H, C_1 - C_{20} acylamino, G_1 - C_{20} acyloxy; C_1 - C_{20} alkanoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenyl, C_1 - C_{20} alkenyl, C_1 - C_{20} alkenyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_6 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3:

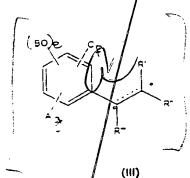
R', R'', and R''' are independently H or C_1 - C_2 0 linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_1 0 alkoxycarbonyl, NH₂, CONH₂, C_1 - C_2 0 acylamino, C_1 - C_2 0 alkoxycarbonyl, OH, C_1 - C_2 0 alkoxy, halo or cyano.

 $X = NH, O, S, S=O, or SO_2$

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28. A compound of the formula III.



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wherein stereocenters (designated by *) could be R- or S-.

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H_1^l , C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR₂; and f and g are independently integers from 0 to 3;

B is independently H, C_1 – C_{20} acylamino, C_1 – C_{20} acyloxy; C_1 – C_{20} linear or branched alkanoyl, C_1 – C_{20} linear or branched alkenyl, C_1 – C_{20} alkoxycarbonyl, C_1 – C_{20} linear or branched alkoxy, C_1 – C_{20} linear or branched alkyl amino, C_1 – C_{20} alkylcarboxylamino, C_1 – C_{20} carbalkoxy, C_5 – C_{20} aroyl, C_6 – C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

- R', R'', and R''' are independently H or C_1 - C_{20} linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, cyano.
- 29. A pharmaceutically composition containing a blood glucose lowering effective amount of a compound of the formula III in a pharmaceutically acceptable carrier.

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wherein stereocenters (designated y *) could be R- or S-.

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano. halo, hydroxy; thiol, SOR or SOR₂; and f and g are independently integers from 0 to 3;

B is independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkenyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_5 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

- R', R'', and R''' are independently H or C₁-C₂₀ linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C₁-C₂₀ alkoxycarbonyl, NH₂, CONH₂, C₁-C₂₀ acylamino, C₁-C₂₀ alkoxycarbonyl, OH, C₁-C₂₀ alkoxy, halo, cyano.
- 30. A method for lowering blood glucose in a subject comprising administering to said subject an effective blood glucose lowering amount of a composition of the formula III.

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wherein stereocenters (designated by *) could be R- or S-.

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H, C_1 - C_2 acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR₂; and f and g are independently integers from 0 to 3;

B is independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkenyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_5 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C_1 - C_{20} linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, cyano.

31. A pharmaceutical composition containing a serum triglyceride lowering effective amount of a compound of formula I in a pharmaceutically acceptable carrier.

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wherein stereocenters * are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C_1/C_{20} linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR₃, where $R_3 = H$ or C_1-C_{20} linear or branched alkyl or C_5-C_{20} aryl; CONR₁R₂, where R₁ and R₂ may be independently or together H, linear or branched C_1-C_{20} alkyl or C_5-C_{20} aryl, NH₂, OH, C_1-C_{20} linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, linear or branched C_1 - C_{20} alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkylamino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B" are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkyl carboxyl amino, C_1 - C_{20} carbalkoxy; aroyl, araalkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

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- 32. A composition according to Claim 31 wherein C and A are hydrogen.
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- 33. A composition according to Claim 37 wherein q=2 and B is methyl.
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- 34. A composition according to Claim/31 wherein A' is hydrogen and r = 0.

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- 35. A composition according to Claim 31 wherein A" is hydrogen and s = 0.
- 36. A composition according to Claim 31 wherein R is hydrogen and R' is COOR₃, wherein R₃ is hydrogen, a cation, C/C_{10} alkyl or C_5-C_{10} aryl.
- 37. A composition according to Claim 31 wherein X is oxygen; R"" is hydrogen; and R" and R" are independently -COOR₃. Wherein R_3 is hydrogen, a cation, C_1 - C_{10} alkyl or C_5 - C_{10} aryl.
 - 38. The composition according to Claim 31 wherein the compound comprises:

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39. A method for lowering serum triglyceride in a subject comprising administering to said subject an effective serum triglyceride lowering amount of a

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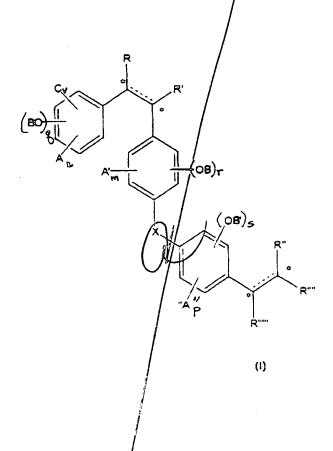
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composition containing a compound of the formula I in a pharmaceutically acceptable carrier.



wherein stereocenters * are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR₃, where R_3 = H or C_1 - C_{20} linear or branched alkyl or C_5 - C_{20} aryl; $CONR_1R_2$, where R_1 and R_2 may be independently or together H, linear or branched C_1 - C_{20} alkyl or C_5 - C_{20} aryl, NH₂, OH, C_1 - C_{20} linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, linear or branched C_1 - C_{20} alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkylamino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B" are independently H, C₁-C₂₀ acylamino, C₁-C₂₀ acyloxy; C₁-C₂₀ linear or branched alkanoyl, C_1 - C_{20} linear or branched alkenyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy; C₁-C₂₀ linear or branched alkyl amino, C₁-C₂₀ alkyl carboxyl amino, C_1 , C_{20} carbalkoxy; aroyl, araalkanoyl, carboxyl, kyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

R''', R'''' and R''''' are independently H, C_1 - $\not C_{20}$ linear or branched alkyl or alkenyl groups which may contain substituents, COOH. C_1 - Q_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, or cyano. $X = NH, O, S, S=O, or SO_2.$

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A method according to Claim, 39 wherein C and A are hydrogen. 40.

A method according to Claim 40 wherein q=2 and B is methyl.

A method according to Claim/39 wherein A' is hydrogen and r = O. 42.

A method according to Claim 39 wherein A" is hydrogen and s = O. 43.

A method according to Claim 39 wherein R is hydrogen and R' is -COOR₃ 44. wherein R_3 is hydrogen, a cation, C_1 - C_{10} /alkyl or C_5 - C_{10} aryl.

A method according to Claim 39 in formula I wherein X is oxygen; R" is 45. hydrogen; and R" are independently -COOR3, wherein R3 is hydrogen, a cation, C1- C_{10} alkyl or C_5 - C_{10} aryl.

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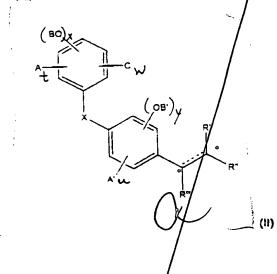
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The method according to Claim 39 wherein said compound comprises: 46.

47. A pharmaceutically composition containing a serum triglyceride lowering effective amount of a compound of the formula II in a pharmaceutically acceptable carrier.

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wherein stereocenters * are R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

A, A', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} alkanoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_6 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R''' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo or cyano. X = NH, O, S, S=O, or SO₂

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48. A method for lowering serum triglyceride in a subject comprising administering to said subject an effective serum triglyceride lowering amount of a composition of the formula II.

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At (OB')

A'U

R'

(III)

wherein stereocenters * are R or S

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

A. A', and C are independently H. C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} alkanoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenyl, C_1 - C_2 0 alkenyl, $C_$

R', R'', and R''' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo or cyano. X = NH, O, S, S=O, or SO₂

49. A pharmaceutically composition containing a serum triglyceride lowering effective amount of a compound of the formula III in a pharmaceutically acceptable carrier.

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wherein stereocenters (designated by *) could be R- or S-.

dotted lines indicate that a double bond may be present or absent. and the double bond geometry may be E or Z;

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A and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR₂; and f and/g are independently integers from 0 to 3;

B is independently H, C_1 - C_{20} adylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkenyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_5 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C_1 - C_{20} linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, cyano.

50. A method for lowering serum triglyceride in a subject comprising administering to said subject an effective serum triglyceride lowering amount of a composition of the formula III.

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wherein stereocenters (designated by *) could be R- or S-.

dotted lines indicate that a double bond/may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H, C/- O_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} alkoxycarboxyl, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR₂; and f and/g are independently integers from 0 to 3;

B is independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkenyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_5 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

- R', R'', and R''' are independently H or C_1 - C_{20} linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, cyano.
- 51. A pharmaceutical composition containing a blood pressure lowering effective amount of a compound of formula I in a pharmaceutically acceptable carrier.

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wherein stereocenters * are R or S

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR₃, where R_3 = H or C_1 - C_{20} linear or branched alkyl or C_5 - C_{20} aryl; CONR₁R₂, where R₁ and R₂ may be independently or together H, linear or branched C_1 - C_{20} alkyl or C_5 - C_{20} aryl, NH₂, OH, C_1 - C_{20} linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, linear or branched C_1 - C_{20} alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkylamino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

B, B', and B" are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkyl carboxyl amino, C_1 - C_{20} carbalkoxy; aroyl araalkanoyl, carboxyl, cyano, halo, hydroxy; and q, r and s are independently integers from 1 to 3;

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R''', R'''' and R''''' are independently H. C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, or cyano. X = NH, O, S, S=O, or SO₂.

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52. A composition according to Claim 51 wherein C and A are hydrogen.

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53. A composition according to Claim \$\frac{1}{2}\$ wherein q=2 and B is methy.

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54. A composition according to Claim 51 wherein A' is hydrogen and r = 0.

55. A composition according to $O(\frac{1}{2})$ wherein A" is hydrogen and s = O.

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56. A composition according to Claim 51 wherein R is hydrogen and R' is – $COOR_3$, wherein R_3 is hydrogen, a cation, C_1 - C_{10} alkyl or C_5 - C_{10} aryl.

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57. A composition according to Claim 51 wherein X is oxygen; R''' is hydrogen; and R''' and R''' are independently -COOR_{3.} wherein R₃ is hydrogen, a cation, C_1 - C_{10} alkyl or C_5 - C_{10} aryl.

58. The composition according to Claim 51 wherein the compound comprises:

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59. A method for lowering blood pressure in a subject comprising administering to said subject an effective blood pressure lowering amount of a composition containing a compound of the formula I in a pharmaceutically acceptable carrier.

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wherein stereocenters * are R or S;

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

R and R' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups that may be substituted, or functional groups like COOR₃, where R_3 = H or C_1 - C_{20} linear or branched alkyl or C_5 - C_{20} aryl; CONR₁R₂, where R₁ and R₂ may be independently or together H, linear or branched C_1 - C_{20} alkyl or C_5 - C_{20} aryl, NH₂, OH, C_1 - C_{20} linear or branched alkoxy, halo, cyano, or R+R'=O.

A, A', A'', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, linear or branched C_1 - C_{20} alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy; C_1 - C_{20} linear or branched alkylamino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and n, m, and p are independently integers from 0 to 3;

are independently integers from 1 to 3:

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R''', R'''' and R''''' are independently H, C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C $_1$ - C_{20} alkoxycarbonyl, NH₂, CONH₂, C₁- C_{20} acylamino, C₁- C_{20} alkoxycarbonyl, OH, C₁- C_{20} alkoxy, halo, or cyano. C_1 - C_2 0 alkoxy, halo, or cyano.

60. A method according to Claim 59 wherein C and A are hydrogen.

61. A method according to Claim 60 wherein q=2 and B is methyl.

62. A method according to Clarin 59 wherein A' is hydrogen and r = 0.

63. A method according to Claim 59 wherein A" is hydrogen and s = 0.

64. A method according to Claim 59 wherein R is hydrogen and R' is $-COOR_3$. wherein R_3 is hydrogen, a cation, C_1 - C_{10} -alkyl or C_5 - C_{10} aryl.

65. A method according to Claim 59 in formula I wherein X is oxygen; R''' is hydrogen; and R''' are independently -COOR₃, wherein R₃ is hydrogen, a cation, C₁-C₁₀ alkyl or C₅-C₁₀ aryl.

66. The method according to Claim 59 wherein said compound comprises:

67. A pharmaceutically composition containing a blood pressure lowering effective amount of a compound of the formula II in a pharmaceutically acceptable carrier.

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wherein stereocenters * are R or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

A. A', and C are independently H/ C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} alkanoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_6 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R''' are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo or cyano.

 $X = NH, O, S, S=O, or SO_2$

68. A method for lowering blood pressure in a subject comprising administering to said subject an effective blood pressure lowering amount of a composition of the formula

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wherein stereocenters * are R/or S;

dotted lines indicates that a double bond may be present or absent, and the double bond geometry may be E or Z;

A, A', and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; and t, u, and w are independently integers from 0 to 3;

B and B' are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} alkanoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} alkenoyl, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_6 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and x and y are independently integers from 0 to 3;

R', R'', and R', are independently H or C_1 - C_{20} linear or branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo or cyano. X = NH, O, S, $S = O_0$ or SO_2

69. A pharmaceutically composition containing a blood pressure lowering effective amount of a compound of the formula III in a pharmaceutically acceptable carrier.

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wherein stereocenters (designated by could be R- or S-.

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR₂; and f and g are independently integers from 0 to 3;

B is independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkenyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_5 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C_1 - C_{20} linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C_1 - C_{20} alkoxycarbonyl, NH₂, CONH₂, C_1 - C_{20} acylamino, C_1 - C_{20} alkoxycarbonyl, OH, C_1 - C_{20} alkoxy, halo, cyano.

70. A method for lowering blood pressure in a subject comprising administering to said subject an effective blood pressure lowering amount of a composition of the formula III.

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wherein stereocenters (designated by *) could be R- or S-.

dotted lines indicate that a double bond may be present or absent, and the double bond geometry may be E or Z;

A and C are independently H. C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy, C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy; carboxyl, cyano, halo, hydroxy; thiol, SOR or SOR₂; and f and g are independently integers from 0 to 3;

B is independently H, C_1 - C_{20} acylamino, C_1 - C_{20} acyloxy; C_1 - C_{20} linear or branched alkanoyl, C_1 - C_{20} linear or branched alkenyl, C_1 - C_{20} alkoxycarbonyl, C_1 - C_{20} linear or branched alkoxy, C_1 - C_{20} linear or branched alkyl amino, C_1 - C_{20} alkylcarboxylamino, C_1 - C_{20} carbalkoxy, C_5 - C_{20} aroyl, C_6 - C_{20} araalkanoyl, carboxyl, cyan, halo, hydroxy; and e is an integer from 1 to 3;

R', R'', and R''' are independently H or C₁-C₂₀ linear and branched alkyl or alkenyl groups which may contain substituents, COOH, C₁-C₂₀ alkoxycarbonyl, NH₂, CONH₂, C₁-C₂₀ acylamino, C₁-C₂₀ alkoxycarbonyl, OH, C₁-C₂₀ alkoxy, halo, cyano.

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